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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,689	12/10/1999	RYO FUJIMOTO	35.G2512	9176

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER
PANNALA, SATHYANARAYA R

ART UNIT	PAPER NUMBER
2164	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/458,689	FUJIMOTO ET AL.
	Examiner	Art Unit	
	Sathyanarayan Pannala	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 January 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-12,14-20,22-29,31-37,39-46 and 48-59* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-12,14-20,22-29,31-37,39-46 and 48-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Applicant's Amendment filed on 1/09/2006 has been entered with amended

claims 1-3, 6, 8, 10-12, 15, 18-20, 23, 25, 27-29, 31-37, 40, 42, 44-46, 49, 52-59 and

canceled claim 60. Claims 1-3, 5-12, 14-20, 22-29, 31-37, 39-46 and 48-59 are pending

in this Office Action.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
>
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
>
> the prior art are such that the subject matter as a whole would have been obvious at the time the
>
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
>
> Patentability shall not be negatived by the manner in which the invention was made.

> This application currently names joint inventors. In considering patentability of the claims
>
> under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was
>
> commonly owned at the time any inventions covered therein were made absent any evidence to the
>
> contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and
>
> invention dates of each claim that was not commonly owned at the time a later invention was made in
>
> order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e),
>
> (f) or (g) prior art under 35 U.S.C. 103(a).

3.   Claims 1-3, 5-9,18-20, 22-26, 35-37, 39-43,52,54, 56 and 58 are rejected under

35 U.S.C. 103(a) as being unpatentable over Hoffman (US Patent 5,761,655)

hereinafter Hoffman, in view of Schwartz et al. (US Patent 5,905,988) hereinafter

Schwartz and in view of Shingo et al. (JP09-274659) hereinafter shingo.

4.   As per independent claims 1, 18, 35, 58, Hoffman teaches a system to store,

retrieve and display images of thumbnail size. The size of the thumbnails displayed can

be changed to allow visually reviewing a large number or concentrating on a smaller

number of but larger size images after reduction in the umber of thumbnails.

Thumbnails as well as other image files and other related text files are indexed and

searched using keywords. The search can be performed using personalized super-

keywords, which are combinations of keywords and other file and data characteristics

as keywords (col. 4, lines 8-21). Hoffman teaches the claimed "image storage means

for storing a plurality of images" as the system reduces the original image size to the

thumbnail image and stores the color data in the record (Fig. 2, col. 6, lines 18-21).

Further, Hoffman teaches the claimed "selecting means for selecting a single image

form the plurality of images, wherein the single image includes a plurality of objects" as

the image files are retrieved, by conventional systems, thumbnails are created and

displayed and it is well known that the single image includes plurality of objects (Fig. 1,

col. 5, lines 64-66). Further, Hoffman teaches the claimed "input means (examiner

interpreted input as clicking on keywords from Hoffman [see Fig. 15, col. 11,

lines 19-23]) for inputting management information (examiner interpreted management information as pixel data from Hoffman for each of the plurality of objects within single image [see Fig. 3, col. 6, lines 43]). Further, Hoffman does not explicitly teach describing an interrelationship with at least another object. However, Schwartz teaches "a word describing an interrelationship between one object with at least one other object" as one picture on the web along with any accompanying text describing the content picture (col. 13, lines 18-21). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to combine the teachings of the cited references because Schwartz's teachings would have allowed Hoffman's method to provide adoptive serial presentation of the desired items (col. 3, lines 28-30).

Further, Hoffman and Schwartz do not explicitly teach position and interrelationship between two objects. However, Shingo teaches the claimed "an interrelationship between one object with at least other object and position" as a predetermined criteria image in two-dimensional by the seek area in an input image, and it is each location of the seek area. The cross correlation function is added to the lengthwise direction and longitudinal direction of the seek area, and it is constituted as the image alignment approach characterized by making into the aggregate value of this longitudinal direction converted into the greatest value. The aggregate value is the square of the cross correlation function and is the image alignment value (Paragraph 0004). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to combine the teachings of the cited

references because Shingo's teachings would have allowed Hoffman's method to

improve cross-correlation coefficient method and it offers a greater performance in

alignment of the exact image without increasing the operation time (paragraph 0003).

Finally, Hoffman teaches the claimed "memory means for storing the

management information input said input means in association with the single image" as

the closest match is saved 172 as the pixel in the thumbnail image (at Fig. 5, col. 7,

lines 2-14).

5.   As per dependent claims 2, 19, 36, Hoffman teaches the claimed "the

management information further includes at least one of a general name of an object, a

qualifier therefor, and a proper in thereof" as the system allows the user to have a

custom set of super keywords allowing a personalized search process without cluttering

the search for other users (Fig. 19A-B, col. 3, lines 14-21 and col. 13, line 60 to col.14,

line 20).

6.   As per dependent claims 3, 20, 37, Further, Hoffman teaches the claimed "the

management information further includes information expressing a state (examiner

interpreted state as color from Hoffman) [see Fig. 15, col. 11, line 23] of an object in the

single image" as a color selection 406 of screen 400 allows the colors of the image to

be selected using color boxes (Fig. 15, col. 11, lines 23-25).

7.   As per dependent claims 5, 22, 39, Hoffman teaches the claimed "a plurality of words can be specified as the qualifier" as keyword selection section 402 allows the user to indicate number of matches (Fig. 19A-B, col. 3, lines 14-21 and col. 13, line 60 to col.14, line 20).

8.   As per dependent claims 6, 23, 40, Hoffman teaches the claimed "input means includes position designating (examiner interpreted designating as must match from Hoffman [see Fig. 15, col. 11, line 21]) means designating a position of an object in the single image, and display means for displaying an input window used to input management information concerning the object at the designated position" as one of the keyword selected is allowed to indicate as a must match keyword 415 by must match key depressed (Fig. 15, col. 11, lines 19-23).

9.   As per dependent claims 7, 24, 41, Hoffman teaches the claimed "the position designating means designates positions of two mutually-related objects in the single image" as the must match keyword will indicate the closely related to the image in comparison to other selected key words (Fig.15, col. 11, lines 19-23).

10.   As per dependent claims 8, 25, 42, Hoffman teaches the claimed "query input means for inputting query for retrieval, and image retrieving means for retrieving including an object image that meets the query inputted by said query input means" as

the disclosure is designed to allow fast matching of m out of n keywords (Fig. 15,

col. 11, lines 39-48).

11.   As per dependent claims 9, 26, 43, Hoffman teaches the claimed "input means

inputs supplementary information including at least one of imaging-related information

of the single image, special object information thereof, category formation thereof,

impression information thereof, time information thereof, place information thereof,

weather information thereof, and event information thereof" as three databases are

involved in the keyword search and disclosed in detail (at Fig. 16, col. 11, lines 49-64).

12.   As per dependent claims 52, 54 and 56, Hoffman teaches the claimed "the

management information is textual information" as the reminder of the space of the

screen 210 to be used for text or other data, which needs to be combined with the

images (Fig. 9, col. 9, lines 9-13).

13.   Claims 10-12, 14-17, 27-29, 31-34, 44-46, 48-51, 53, 55,57 and 59 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US Patent 5,761,655)

hereinafter Hoffman and in view of Schwartz et al. (US Patent 5,905,988) hereinafter

Schwartz.

14.   As per independent claims 10, 27, 44, 59, Hoffman teaches a system to store,

retrieve and display images of thumbnail size. The size of the thumbnails displayed can

be changed to allow visually reviewing a large number or concentrating on a smaller

number of but larger size images after reduction in the umber of thumbnails.

Thumbnails as well as other image files and other related text files are indexed and

searched using keywords. The search can be performed using personalized super-

keywords, which are combinations of keywords and other file and data characteristics

as keywords (col. 4, lines 8-21). Hoffman teaches the claimed "image storage means

for storing a plurality of images, wherein each image includes a plurality of objects" as

the system reduces the original image size to the thumbnail image and stores the color

data in the record and it is well known that the single image includes plurality of objects

(Fig. 2, col. 6, lines 18-21). Further, Hoffman teaches the claimed "memory means for

storing management information for each of a plurality of objects included in a single

image in association with the single image" as (examiner interpreted management

information for an image a as pixel data from Hoffman for the plurality of objects [see

Fig. 3, col. 6, lines 43]) (Fig. 1, col. 5, lines 64-66).

Further, Hoffman does not explicitly teach describing an interrelationship

between two objects. However, Schwartz teaches the claimed "the management

information includes a word describing an interrelationship between one object with at

least one other object" as one picture on the web along with any accompanying text

describing the contents of the picture (col. 13, lines 18-21). Thus, it would have been

obvious to one of ordinary skill in the data processing art at the time of the invention, to

combine the teachings of the cited references because Schwartz's teachings would

have allowed Hoffman's method to provide adoptive serial presentation of the desired

items (col. 3, lines 28-30). Further, Hoffman teaches the claimed "query input means

for inputting query for retrieval, wherein the query includes at least a word" as the

invention allow fast match of m out of n keywords when hundreds of thousands of files

are being managed and provides a unique method of searching keyword data (Fig. 15,

col. 3, lines 14-21 and col. 11, lines 39-43).

Finally, Hoffman teaches the claimed "retrieving means for retrieving an image

including an object that meets the query inputted by said query input means, based on

the management information stored in said memory means" as a dominant color and

original height and width allow index search on three criteria (Fig. 7A col. 8,

lines 56-59).

15.   As per dependent claims 11, 28, 45, Hoffman teaches the claimed "the

management information further includes at least one a general name of an object, a

qualifier therefor, a proper noun thereof, and a position thereof" as the system allows

the user to indicate number of keywords matching and as well as designating certain

keywords as must match keywords (Fig. 19A-B, col. 3, lines 14-21 and col. 13, line 60

to col.14, line 20).

16.   As per dependent claims 12, 29, 46, Hoffman teaches the claimed "the

management information further includes information expressing a state (examiner

interpreted state as color from Hoffman [see Fig. 15, col. 11, line 23]) of an object in the

single image" as a color selection 406 of screen 400 allows the colors of the image to

be selected using color boxes (Fig. 15, col. 11, lines 23-25).

17.   As per dependent claims 14, 31, 48, Hoffman teaches the claimed "the qualifier

is compromise of a plurality of words can be specified as the qualifier" as keyword

selection section 402 allows the user to indicate number of matches (Fig. 19A-B, col. 3,

lines 14-21 and col. 13, line 60 to col.14, line 20).

18.   As per dependent claims 15, 32, 49, Hoffman teaches the claimed "further

comprising a position designating means for designating a position of an object of

interest in the single image, and display means for displaying an input window used to

input the management information concerning the object at the designated position" as

one of the keyword selected is allowed to indicate as a must match keyword 415 by

must match key depressed (Fig. 15, col. 11, lines 19-23).

19.   As per dependent claims 16, 33, 50, Hoffman teaches the claimed "wherein said

position designating means designates positions of two mutually-related objects in the

single image" as the must match keyword will indicate the closely related to the image in

comparison to other selected key words (Fig.15, col. 11, lines 19-23).

20.   As per dependent claims 17, 34, 51, Hoffman teaches the claimed "wherein said

input means inputs supplementary information including at least one of imaging-related

information of the single image, special object information thereof, category information

thereof, impression information thereof, time information thereof, place information

thereof, weather information thereof, and event information thereof" as three databases

are involved in the keyword search and disclosed in detail (at Fig. 16, col. 11,

lines 49-64).

21.   As per dependent claims 53, 55 and 57, Hoffman teaches the claimed "the

management information is textual information" as the reminder of the space of the

screen 210 to be used for text or other data, which needs to be combined with the

images (Fig. 9, col. 9, lines 9-13).

Response to Arguments

22.   Applicant's arguments filed on 1/09/2006 have been fully considered but they are

moot in view of the new ground of rejection. Hoffman and Schwartz references are

combined with the newly found Shingo teach each and every limitation as discussed

above.

a)   Applicant's argument stated as "Referring to Figure 9 of Hoffman, It is

Applicants' understanding, however, that this text is nothing more than the file

name of the image."

In response to the Applicant's argument, Examiner respectfully disagrees

because, one, the reference does not belong to claim 1. Two, regarding Hoffman

Fig. 9 interpretation is not correct. He teaches as "Fig. 9 illustrates medium size

thumbnail images where only a portion of the screen is being used for images,

allowing the remainder of the screen to be used for **text** or other data, which

needs to be combined with the images" (col. 9, lines 9-13).

Conclusion

23.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sathyanarayan Pannala whose telephone number is

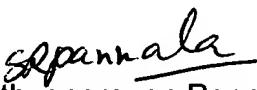(571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sathyanarayan Pannala
Examiner
Art Unit 2164

srp
April 17, 2006